Marine & Offshore

Certificate number: 60787/A5 MED
File number: ACI1360/024/004
Item number: MED/3.18d

This certificate is not valid when presented without the full attached schedule composed of 7 sections

www.veristar.com

Notified Body 2690 - MARINE EQUIPMENT DIRECTIVE 2014/90/EU

EC TYPE EXAMINATION CERTIFICATE

as per Module B of Directive 2014/90/EU of the European Parliament and of the Council of 23 July 2014 as transposed in the French Regulations and Commission Implementing Regulation (EU) 2023/1667 of 8 Aug. 2023

This certificate is issued to:

Thermaflex International Holding bv

Veerweg 1, 5145 NS, Waalwijk, NETHERLANDS

for the type of product

SURFACE MATERIALS AND FLOOR COVERINGS WITH LOW FLAME-SPREAD CHARACTERISTICS: PIPE INSULATION COVERS

ThermaSmart® Marine 2.0 Black Sheet
ThermaSmart® Marine 2.0 Black Tube

Requirements:
SOLAS 74 convention as amended, Regulations II-2/3, II-2/5, II-2/6, II-2/9, X/3
IMO Res. MSC.36(63) -(1994 HSC Code)- as amended, 7
IMO Res. MSC.97(73) -(2000 HSC Code)- as amended, 7
IMO Res. MSC.307(88) (2010 FTP Code), as amended.
IMO MSC/Circ.1120

This certificate is issued on behalf of the French Maritime Authorities to attest that Bureau Veritas Marine & Offshore did undertake the relevant type-examination procedures for the product identified above which was found to comply with the relevant requirements of the Directive 2014/90/EU of the European Parliament and of the Council of 23 July 2014 as transposed in the French Regulations.

This certificate will expire on: 15 Feb 2025

For Bureau Veritas Marine & Offshore Notified Body 2690,
At BV GRONINGEN, on 28 Aug 2024,
Olaf RUITER

This certificate was created electronically and is valid without signature

This certificate does not allow to issue the Declaration of Conformity and to affix the mark of conformity (wheelmark) to the products corresponding to this type. To this end, the production-control phase module (D, E or F) of Annex II of the Directive is to be complied with and controlled by a written inspection agreement with a notified body.

This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. Bureau Veritas Marine & Offshore is designated by the French Maritime Authority as a "notified body" under the terms of the French Regulations Division 140 Chapter 140-2. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

1.1 - ThermaSmart® Marine 2.0 Black Sheet

Thermal insulation complex for cold services (see § 4.3) made of 2 directly extruded layers of 10 or 13 mm thick of "ThermaSmart PRO LS" polyolefin foam (density 32 kg/m³), laminated by heat-sealing process and faced on exposed side with a black aluminium foil (thickness 25 µm) with heat-activated polyethylene back coating (thickness 20 µm).
Maximum thickness of laminated layer: 25 mm

For insulation thickness from 25 mm and above:
- upper layer : "ThermaSmart Marine 2.0 Black" in 25 mm (see above for description)
- under layer (on pipe) : assembly by heat-sealing process of several layers combination of "ThermaSmart PRO LS" polyolefin foam (density 32 kg/m³)

Under layer is fully glued to pipe, upper layer is laid unglued on the under layer.

Note: tests have been done on a 50 mm (25 mm + 25 mm) assembly with "ThermaSmart PRO LS" layers glued on a 1 mm thick steel sheet.

1.2 - ThermaSmart® Marine 2.0 Black Tube

Thermal insulation complex for cold services (see § 4.3) made of made of directly extruded layer of "ThermaSmart PRO LS" polyolefin foam (density 32 kg/m³) faced on exposed side with a black aluminium foil (thickness 25 µm) with heat-activated polyethylene back coating (thickness 20 µm).
Maximum extruded thickness: 32 mm

For insulation thickness of 50 mm (maximum thickness):
- Inner diameter < 60 mm : Tube-on-tube solution.
  First tube is "ThermaSmart PRO LS" and "ThermaSmart Marine 2.0 Black tube" is placed around.
- Inner diameter 60 – 114 mm : Tube-sheet solution.
  First tube is "ThermaSmart PRO LS" tube in desired thickness and "ThermaSmart Marine 2.0 Black sheet" is placed around to reach the desired thickness for installation.
- Inner diameter > 114 mm : Tube is not applicable anymore for installation.
  ThermaSmart Marine 2.0 Black sheet as described in paragraph 1.1 will always be used.

Under layer is glued to pipe along side the edges, upper layer is laid unglued on the under layer.

2. DOCUMENTS AND DRAWINGS:

2.1 - Complete Product Data Sheet (CPDS) "ThermaSmart® Marine 2.0 Black_201909" dated 05/05/2021.

2.2 - Technical Data Sheet "ThermaSmart® Marine 2.0 Black Tube" v1.2 dated 18/05/2024.

2.3 - Technical Data Sheet "ThermaSmart® Marine 2.0 Black Sheet" v1.3 dated 01/08/2024.

3. TEST REPORTS:

Test report N° 210419-1 dated 14/06/2021, as per IMO 2010 FTP Code, Annex 1, Part 5, from Warringtonfire Frankfurt GmbH, Germany.

4. APPLICATION / LIMITATION:

4.1 - In application of FTP Code 2010 Annex 2 § 2.2, the product is expected to satisfy the requirement of smoke & toxicity without further testing.

4.2 - In application of FTP Code 2010 Annex 2 § 2.3, the product is expected to satisfy the requirement of maximum gross calorific value (e.g. 45 MJ/m²) without further testing.

4.3 - Approved for use as insulating material in refrigeration systems and chilled water piping for air-conditioning systems. May also be used for pipe insulation in cargo spaces.

4.4 - The fitting aboard to be the same as used for the test.

5. PRODUCTION SURVEY REQUIREMENTS:

5.1 - This certificate alone does not allow the applicant to issue the Declaration of Conformity and to affix the mark of conformity (wheelmark) to the products corresponding to this type. To this end, the production-control phase module D Production Quality Assurance or module E Product Quality Assurance or module F Product Verification of Annex II of the Directive is to be complied with and controlled by a written inspection agreement with a Notified Body.

5.2 - For information concerning the production phase modules, **Thermaflex International Holding bv** has declared the following manufacturing site:

Thermaflex Izolacji Spólka z o.o
ul.Przemyslowa 6
58-130 Zarów
Poland

6. MARKING OF PRODUCT:

Reference is made to MED 2014/90/EU chapter 2.
In particular Article 10.3 specifies that the wheelmark shall be followed by the identification number of the Notified Body involved in the production control phase (module D, E or F) and by the year in which the mark is affixed (4 digits or last 2 digits).

7. OTHERS:

7.1 - It is **Thermaflex International Holding bv**'s responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

7.2 - This Certificate supersedes EC Type Examination Certificate N°60787/A4 MED issued on 21/06/2024 by the Society.

***** END OF CERTIFICATE *****